MONTHLY HIGHLIGHTS

NOAA
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
HABITAT CONSERVATION DIVISION

MAY 2003

GLOUCESTER, MA OFFICE, ONE BLACKBURN DRIVE, GLOUCESTER, MA 01930

HIGH SCHOOL INTERN PULLING TOGETHER GIS DATA

The Gloucester field office was fortunate to have an intern from Essex Agricultural and Technical High School for the past two months. Andy Johnson joined our office as part of a volunteer program sponsored by the high school. As part of our goal to incorporate GIS technology into project review, Andy started by creating a poster size eelgrass map for Maine from existing data. Areas with mapped eelgrass were then isolated and printed on individual pages for easy reference in the field. He has also been downloading existing GIS data layers for Maine and New Hampshire from various sites. The information Andy has collected will be supplemented by our college summer intern from Norfolk State University, Pearl Adisi. Andy has been wonderful to work with and his efforts will be a big first step to reaching our goal of incorporating technology into project review.

Andy took part in Essex A&T's Environmental Science program, a 3 year major in water resources and local and global watershed education. An innovative and exciting educational program, the Environmental Science program incorporates field research/experimentation and "expeditionary learning" to reinforce classroom instruction. Andy plans to attend URI's ocean engineering program next year. We expect he will do well. **(sean.mcdermott@noaa.gov, 978/ 281-9113)**

CAUSEWAY REMOVAL TO ENHANCE SHELLFISH HABITAT

Activities to remove a portion of the causeway to Dingley Island, Maine, is currently underway. Blocking normal water flow, the causeway has created a depositional environment along the western shore of Dingley Island. Increased siltation is thought to have reduced the habitat value for soft-shell clams. Placing a 3-sided box culvert at the center of the causeway will restore water flow and reduce the amount of siltation in the area. Pre-construction monitoring for sediment profile, grain size analysis, invertebrate community composition, shellfish distribution, and other parameters will be repeated post-construction to evaluate progress. This project is partially funding NOAA's Community-based restoration Program.
(sean.mcdermott@noaa.gov, 978/ 281-9113)

MAINE DOT TAKES PROACTIVE MEASURES FOR SALT MARSH

At a site visit on May 6, the Maine Department of Transportation (MEDOT) requested comments, including mitigation needs, from all interested resource agencies regarding a culvert replacement under Route 1 in Scarborough. The existing twin 14 foot culverts are in need of repair or replacement. The MEDOT plans to replace the culverts with a single span concrete bridge, a decision regulatory agencies are viewing as a positive move for the environment. Installing the new bridge span, which could be up to 40', will increase tidal flow capacity into Dunstan Marsh. In addition, the channel, which was re-aligned when the culverts were installed, will be returned to it's historic footprint. Dunstan Marsh, a 135-acre salt marsh, has been targeted for restoration because of the extensive presence of *Phragmites australis*, an invasive non-native plant. A separate but related restoration effort in Dunstan Marsh is currently being planned by the Army Corps of Engineers (ACOE). **(sean.mcdermott@noaa.gov, 978/ 281-9113)**

HABITAT ECONOMICS WORKSHOP

During the week of April 4, Habitat Conservation Division (HCD) staff attended a 2½-day Habitat Economics Workshop in Long Beach, CA. The workshop, arranged by NMFS' Office of Habitat Conservation, was intended to help share an understanding between HCD staff at all levels and their partner in other NOAA programs of the opportunities and challenges involved in integrating economics into the program's mission. Participants of the workshop included biologists, ecologists, economists, and lawyers from a number of federal and state cooperating agencies. The general goals of the workshop were to understand the benefits of habitat services and express them in economic terms, extrapolate to estimate the economic value of habitat programs, and incorporate that knowledge into ecosystem-based approaches to resource management. The proposed products of the workshop were to develop strategies for the Office of Habitat Conservation to pursue in developing a socio-economic framework that meets regional and national needs and create a portfolio of specific projects that can be ready to go in the event a targeted funding initiative becomes available. From the perspective of field staff within HCD, the need to develop socio-economic tools that can augment current habitat conservation and protection efforts is apparent: project reviewers are often confronted by economic arguments in support of a project, and are unprepared to assess those arguments or counter them with adequate economic expressions of the existence value of healthy habitat. Although the point of having socio-economic tools for use by HCD staff may be some time away, significant first-steps were made during the workshop towards identifying important initiatives for those goals. **(Mike.R.Johnson@noaa.gov, 978/ 281-9130)**

JAMES J. HOWARD MARINE SCIENCES LABORATORY, HIGHLANDS, NJ 07732

NEW YORK-NEW JERSEY HARBOR - SENIOR PARTNERING MEETING

HCD Staff attended the monthly Senior Partnering Meetings convened by the New York District, ACOE to update the various state and federal agencies on the progress of the harbor deepening, operations, and maintenance and other projects in the harbor. Items discussed included the dredging in the Arthur Kill, the Kill van Kull and the Port Jersey Channel, as well as the Port Authority berth deepening and the proposal to allow industry to mine sand from the

Ambrose Channel prior to the federal deepening. Also mentioned was the Neptune Project, a proposed electric cable that will run across Raritan and Sandy Hook Bays to Jones Inlet with a branch going through the harbor and up the Hudson River. The upcoming Congressional briefing on the harbor deepening was also mentioned. **(Karen Greene, 732/ 872-3023)**

AMBOY AGGREGATES

In accordance with the requirements of their new permit for sand mining in the Ambrose Channel, Amboy Aggregates has provided the ACOE with a proposed winter flounder sampling plan. HCD is in the process of reviewing the proposal with the assistance of the Northeast Fisheries Science Center, and will be providing comments to the ACOE in early June. The requirement for sampling plan requirement and our review of it were included as special conditions of the permit to avoid an elevation of the ACOE permit decision. **(Karen Greene, 732/ 872-3023)**

NEW JERSEY DEPARTMENT OF TRANSPORTATION BRIDGE SCOUR COUNTERMEASURE-SOUTHERN REGION COORDINATION MEETING

Habitat staff met with state and federal agencies on May 19, 2003 to establish protocols for permitting of bridges in several Southern New Jersey streams. The group visited Pennsauken Creek (over Rte.130), Raccoon Creek (over I-295), and Oldmans Creek (over I-295)(all tidal waters), made observations, and discussed various alternatives in an effort to streamline the permitting process. Staff provided information regarding seasonal restrictions that would be recommended to minimize impacts on anadromous fishes during the construction work. Two other bridges, Mill Creek over Rte. 49 and South River over Rte. 50, are included in the project but were not visited . **(anita.riportella@noaa.gov, 732/ 872-3116)**

MORDECAI ISLAND COASTAL WETLANDS RESTORATION

Habitat staff met with state and federal agencies on May 29, 2003 to discuss alternatives for minimizing the erosion of, and addressing the environmental needs of, Mordecai Island, located west of the Long Beach Island barrier near Beach Haven Borough, NJ; and which is adjacent to the New Jersey Intracoastal Waterway, the main navigation channel of Barnegat Bay. Mordecai Island's 67 acres includes *Spartina alterniflora* salt marsh, Phragmites, bayberry, winged sumac, and eastern red cedar. Eelgrass beds are located off the southwestern edge of the Island. The entire coastline of Mordecai Island has suffered from erosion and the western edge is receding at a rate of 3-6 feet per year. Preserving Mordecai Island's marshes, salt ponds, mud flats, and shrub-scrub habitats are important to many breeding, foraging, and nesting shorebirds. Eelgrass habitat that is important habitat for fisheries resources may be impacted by eroded sediments. Various shore protection measures were discussed such as geotubes, biologs, and vinyl sheetpile and breakwater structures. **(anita.riportella@noaa.gov, 732/ 872-3116)**

MILFORD, CT OFFICE, 212 ROGERS AVENUE, MILFORD, CT 06460

REFORMULATION STUDY UPDATE
The Fire Island to Montauk Point Storm Protection Reformulation Study dealing with the 83 miles of Long Island, New York's south shore has generated regional attention as the result of the methods being brought to bear on the threats and risks to that coastline. The development of a vision statement between New York State and the New York District that embraces non-structural solutions to storm damage is being considered as a model for other coastal areas where human use is in conflict with natural processes. New York is noting that there are any number of methods of avoiding "risk' and that protecting existing structures is but one of those methods. With rising sea level, the state is recommending that we consider removing the risk by removing the structures and releasing natural systems to react to the forces engendered within coastal storms. **(Michael.Ludwig@noaa.gov, 203/ 882-6504)**

RESTORATION PROPOSED AT BIG EGG MARSH
The National Park Service (NPS) is proposing to implement a wetland restoration demonstration project with the Gateway national recreation Area. The proposed two acre demonstration is located in Big Egg Marsh, a deteriorating intertidal emergent wetland in Jamaica Bay. The NPS indicates that between 1974 and 1994, approximately 26 acres of smooth cordgrass (Spartina alterniflora) was lost each year. Subsequently, from 1994-1999, the loss rate increased to some 44 acres per year. The NPS is proposing to dredge sediment in the immediate project vicinity and placing the material on top of the marsh surface to increase elevations in a fragmenting portion of the marsh. The Habitat Conservation Division is coordinating with the NPS and ACOE on this issue. **(Diane.Rusanowsky@noaa.gov, 203/ 882-6504)**

CT SEA GRANT CONSIDERS SHELL FISHING INTERACTIONS WITH SAV
The conflict between protecting submerged aquatic vegetation (SAV) and shellfish harvesting in coastal waters has been a topic of a number of coordination and information exchange meetings guided by the Connecticut Sea Grant Program. These efforts have grown out of the ASMFC and federal legislation of the last few years. Aquaculture, traditional shellfish practices, and the presence of SAV has created some concerns that the shellfishing industry might be stifled in the waters of Long Island Sound east of the Connecticut river. With SAVs on the decline and special protections being sought under amendments to the Magnuson - Stevens Fishery Conservation and Management Act, both the feds and state are seeking ways to facilitate the continued growth of shellfishing while attaining the maximum protection of the SAV. That objective is being addressed in Connecticut through meetings with farmers, local Shellfish Commissioners, and the state and federal regulatory community. Charting the present SAV beds in state waters and reviewing prior efforts characterizing the location of the vegetation has proven an inexpensive and effective method of identifying potential conflict areas. The recently completed U.S. Fish & Wildlife Service mapping of Connecticut SAV has improved the foundation and allowed the development of a initial check of the relationship of aquaculture proposals to identified seagrass. Using the information (available from the state on CD) affords Shellfish Commissions the ability to avoid or identify potential conflicts at the earliest possible time. Field efforts by ACOE staff to help locals characterize their situation is proving universally acceptable.
(Michael.Ludwig@noaa.gov, 203/ 882-6504)

FIRE ISLAND NATIONAL SEASHORE ISSUES EA
Staff recently received a federal environmental assessment from the National Park Service

concerning a proposed short term community storm surge protection plan. This document describes and analyzes the types of projects that Fire Island communities may wish to apply for permits to implement before the end of 2005 that could affect the beaches and dunes within Fire Island National Seashore (FINS). These projects generally are intended to address beach and dune change or other erosion processes within the FINS. Generally speaking, the following types of activities were considered in the EA: no action; beach scraping; beach nourishment and associated dredging for acquiring fill; groin removal and/or modification; concrete breakwaters or seawalls; geotubes; sandbags; and other potential actions. The Habitat Conservation Division will review and comment on this proposal. **(Diane.Rusanowsky@noaa.gov , 203/ 882-6504)**

OXFORD, MD OFFICE, 904 SOUTH MORRIS STREET, OXFORD, MD 21654

SAND MINING (MD)

Baltimore District, ACOE, in cooperation with Mineral Management Service (MMS), is evaluating the potential impact of mining sand to replenish beaches at Ocean City, MD. Approximately 800,000 cubic yards of material are required every four years for beach management. The time-frame being considered is 60 years (15 maintenance cycles). The cumulative impact of removing 12 million cubic yards of sand from one or more sites will be considered in conjunction with other replenishment projects along Delmarva Peninsula. Fishery studies are being conducted to determine the present use of four relict sand shoals for feeding, nursery, and/or spawning habitat. The studies are being conducted by VERSAR; their field work will be completed in the summer of 2004, with a draft report due to MMS in the fall of '04. **(Tim Goodger, 410/ 226-5723)**

POPLAR ISLAND RESTORATION

Poplar Island is an on-going restoration project, approximately 1,200 acres in size, in Chesapeake Bay using dredged material from the Baltimore approach channels. When completed, the site will be comprised of approximately 50% upland and 50% wetland habitats to benefit numerous fish and wildlife species. 380,000 wetland plants were planted this past spring. Excessive rain over the last several months has lowered salinities by more than six parts per thousand when compared to last year, which may affect planting success. NMFS, Beaufort Lab, will be conducting follow-up fish monitoring this July. **(Tim Goodger, 410/ 226-5723)**

PEA PATCH ISLAND

Pea Patch Island, located in the Delaware River, DE, is an important natural and historic resource that is experiencing accelerated erosion, primarily from shipping traffic. To provide adequate shoreline stabilization, approximately 5.5 acres of intertidal and shallow subtidal habitat need to be filled. To compensate for the loss of fish habitat, the Philadelphia District, ACOE, has agreed to restore (i.e., enhance Phragmites dominated marsh that was affected adversely by previous disposal of dredged material) at Reedy Point. When completed, as much as 50 acres of Spartina marsh will be restored. **(Tim Goodger, 410/ 226-5723)**